

REMARKS

A. Request for Reconsideration

Applicants have carefully considered the matters raised by the Examiner in the outstanding Office Action but remain of the opinion that patentable subject matter is present. Applicants respectfully request reconsideration of the Examiner's position based on the amendments made to the claims and the following remarks.

B. The Invention

The present invention is directed to a radiographic contrast medium and method of preparing the same.

One of the novel aspects of the invention is that the contrast medium is prepared without the use of an organic solvent. Since there is no organic solvent used in the method of preparing the contrast medium, the contrast medium contains no organic solvent. New claims 27-45 have been added herein to emphasize that the contrast medium contains no organic solvent because the method of preparing the contrast medium does not involve organic solvent.

C. Claims Status

Claims 21-26 are presented for further prosecution.

Claims 1-20 are cancelled herein.

Claims 27-45 have been added herein to more particularly set forth that which Applicants consider to be their invention. No new matter has been added.

Support for new claim 27 can be found, for example, on page 23, line 15-page 24, line 4 of the Specification.

Support for new claim 28 can be found, for example, on page 28, lines 7-11.

Support for new claim 29 can be found, for example, on page 8, paragraph 1.

Support for new claims 30-32 can be found, for example, on page 31, lines 13-23.

Support for new claim 33 can be found, for example, on page 18, lines 1-4.

Support for new claim 34 can be found, for example, on page 26, lines 20-21.

Support for new claims 35-37 can be found, for example, on page 35, lines 17-23.

Support for new claim 38 can be found, for example, on page 9, line 16-page 10, line 12.

Support for new claims 39-41 can be found, for example, on page 25, line 7-page 27, line 2 and page 18, line 17-page 19, line 7.

Support for new claims 42-45 can be found, for example, on page 33, line 16-page 33, line 8.

D. Prior Art Rejection

Claims 1-18 and 21-26 had been rejected as being obvious over Mackaness et al. (U.S. 4,192,859) in view of Otake et al. (U.S. 2004/0099976) or Castor (U.S. 5,554,382) and further in view of Na; and claims 1-26 had been rejected as being obvious over Klaveness et al. (U.S. 5,676,928) in view of Otake or Castor and further in view of Na.

Mackaness and Klaveness had been cited as the primary references to teach a method of preparing a radiographic contrast medium by mixing a phospholipid (col. 3, lines 36-39 of Mackaness; and col. 4, lines 24-25 of Klaveness) with a water-soluble nonionic iodine compound (col. 2, line 64-col. 3, line 15 of Mackaness; and col. 4, lines 48-54 of Klaveness). The Examiner recognized that neither of the primary references teach the use of supercritical or subcritical carbon dioxide, nor do they teach preparing the radiographic contrast medium without organic solvent, and cited Otake and Castor as secondary references to teach those elements. Applicants respectfully submit that these secondary references teach the use of organic solvents in preparation of their materials (paragraphs 26, 57, 60 and 64 of Otake; and col. 3, lines 20-29 of Castor), and

thus, would not lead one of skill in the art to the present invention and, in fact, lead away from the present Invention.

The Examiner had taken the position that Otake and Castor teach that use of a cosolvent is optional, and thus that it would be obvious to one of skill in the art to prepare a liposome without the cosolvent. Applicants respectfully disagree. Both Otake and Castor teach the use of a cosolvent and that the use of such solvents is preferred. Thus, Applicants submit that Otake and Castor teach away from the elimination of an organic solvent in the formation of a liposome.

The primary references cited by the Examiner teach that the organic solvent is necessary for their method of preparing liposomes (col. 3, lines 40-46 of Mackaness; and col. 8, lines 46-52 of Klaveness). The secondary references both teach that the use of a cosolvent during preparation is preferred (paragraph 26 of Otake; and col. 3, lines 20-29 of Castor). Otake teaches that "a cosolvent is preferably used to prepare a uniform mixture of phospholipid and supercritical carbon dioxide" (paragraph 26). Castor teaches that cosolvents "impart desirable solubility features to the SCoCoNC to which they are added with respect to phospholipids and aqueous phases" (col. 3, lines 23-25). Furthermore, both Otake and Castor employ organic solvents to illustrate their respective method of preparing

liposomes. Otake uses cosolvents in each of his embodiments, as recited in Paragraphs 57, 60 and 64. Castor uses cosolvents in each of Examples 1, 2, 4, 5, 6, and 7. One of skill in the art would combine the teachings of the preferred embodiments and Examples when combining references. Thus, the teachings of the secondary references would not lead one of skill in the art to modify the primary references to eliminate the organic solvent.

Thus, Applicants submit that the combination of Mackaness, Otake, Castor and Klaveness would lead one of skill in the art to use an organic solvent in the preparation of the materials. This is contrasted with the present Invention which requires that no organic solvent is used in the preparation and that no organic solvent is present in the contrast medium.

Furthermore, Na does not cure the deficiencies of Mackaness, Otake, Castor and Klaveness. Na also teaches the use of an organic solvent in the preparation of materials. Moreover, Na does not teach a liposome comprised of vesicles including a water-soluble nonionic iodine compound.

Since none of the references cited by the Examiner teach or suggest the liposome of the present invention, it is respectfully submitted that the claims presented herein are patentable over the Examiner's rejections.

E. Double Patenting Rejection

Claims 21, 22 and 25 had been provisionally rejected on the basis of non statutory double patenting over claims 1-4, 6 and 8-10 of copending Application 11/180,849; and claims 21, 22 and 25 had been provisionally rejected on non statutory double patenting over claims 1, 5-7, 11, 12, and 14-17 of copending Application 11/187,397. Since these are both provisional rejections, and all three applications are currently pending, Applicants propose to wait until there is an indication of allowable subject matter before filing a Terminal Disclaimer.


F. Conclusion

In view of the foregoing, it is submitted that the Application is in condition for allowance and such action is respectfully requested. If it is determined that any further fees are due or any overpayment has been made, the Assistant Commissioner is hereby authorized to debit or credit such sum to Deposit Account #02-2275.

Respectfully submitted,

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